

**WHAT IS CLAIMED IS:**

1. An electrode material, having a composition represented by a general formula  $\text{Cu}_{\text{bal.}}\text{X}_a$ , wherein X is at least one element selected from the group consisting of Cr, Zr, Fe, P, and Ag; a is 1.5% by weight or less, and the balance is Cu comprising unavoidable impurities, wherein the electrode material has a structure in which fine particles with a mean particle size of 50 nm or less have precipitated in a structure composed of fibrous crystal grains with a minor axis length of 10  $\mu\text{m}$  or less which are composed of subgrains with a mean grain size of 3  $\mu\text{m}$  or less.

2. The electrode material according to claim 1, wherein the precipitation dispersion state of said fine particles is such that the mean distance between the particles is 200 nm or less.

3. The electrode material according to claim 1, wherein said fine particles are of at least one type selected from the group consisting of Cr,  $\text{Cu}_3\text{Zr}$ ,  $\text{Cu}_9\text{Zr}_2$ , Fe,  $\text{Cu}_3\text{P}$ , and Ag.

4. A method for the manufacture of an electrode material, wherein a Cu-based alloy material is extruded at an extrusion ratio of 4 or higher and at a temperature of 300 to 600°C, said Cu-based alloy material having a composition represented by a general formula  $\text{Cu}_{\text{bal.}}\text{X}_a$ , wherein X is at least one element selected from the group consisting of Cr, Zr, Fe, P, and Ag; a is 1.5% by weight or less, and the balance is Cu comprising unavoidable impurities.

5. The method for the manufacture of an electrode material, according to claim 4, wherein when said extrusion is conducted, the alloy material is subjected in advance to a heat treatment at a temperature of 350 to 700°C.

6. The method for the manufacture of an electrode material, according to claim 4, wherein a heat treatment is conducted at a temperature of 350 to 700°C after said extrusion.